



CONTENTS OF VOLUME 33

Number 1

Computer-aided Fault Tree Synthesis II. Fault Tree Construction ANDRE BOSSCHE (The Netherlands)	1
A Critical Analysis of Appendix R Modification at the Browns Ferry Nuclear Plant CLAIRE L. McCULLOUGH & CALVIN A. McCULLOUGH (USA)	23
A Recursive, Time-Averaged Approach for Fault Tree Quantitative Analysis GEORGE ANESCU (Romania)	49
Survivability Index for CCNs: A Measure of Fuzzy Reliability CAI KAI-YUAN, WEN CHUAN-YUAN & ZHANG MING-LIAN (People's Republic of China)	71
A New Approach to the Estimation of Fatigue Reliability at a Single Stress Level DAOLI CHEN (People's Republic of China)	101
Mixed Hazard Models and Their Applications JOHN YUAN & SHI-WEN SHIH (Taiwan)	115
Some New Aspects of Stress-Strength Modelling M. XIE & K. SHEN (Sweden)	131
Fuzzy Reliability Modeling of Gracefully Degradable Computing Systems CAI KAI-YUAN, WEN CHUAN-YUAN & ZHANG MING-LIAN (People's Republic of China)	141
Calendar	159

Number 2

Computer-Aided Fault Tree Synthesis III. Real-Time Fault Location ANDRE BOSSCHE (The Netherlands)	161
Optimal Selection of Standard Deviation of Design Variables Based on Reliability Requirement KUO-SHONG WANG & FANG-SHYUN HSU (Taiwan)	177
Application and Analysis for a Consecutive- k -out-of- n : G Structure WEIXING ZHANG & WAY KUO (USA)	189

Analysis of a Two-Unit System with Partial Failures and Three Types of Repairs R. K. TUTEJA, R. T. ARORA & GULSHAN TANEJA (India)	199
Reliability-Based Design of Sheet Pile Structures. ADNAN A. BASMA (Jordan)	215
New Approaches to the Estimation of Cumulative Fatigue Reliability DAOLI CHEN (People's Republic of China)	231
Cost Analysis of a Three-Unit Standby System Subject to Random Shocks and Linearly Increasing Failure Rates. RAKESH GUPTA & SACHENDRA BANSAL (India)	249
A Survey of Expert Opinions on the Effectiveness of Non-destructive Examination of Pressure Vessels GUSTAF ÖSTBERG (Sweden)	265
An Approximate Method for Non-repairable Systems Based on the Opportunistic Replacement Policy NASSER FARD & XITONG ZHENG (USA)	277
Applying Sneak Analysis to the Identification of Human Errors of Commission HEIDI A. HAHN, HAROLD S. BLACKMAN & DAVID I. GERTMAN (USA)	289
Technical Notes	
Optimal Number of Redundant Channels for a Digital Communication System. HOANG PHAM (USA)	301
Optimal Testing Policy for a Computer System with Fault Margin T. NAKAGAWA, K. YASUI & M. MOTOORI (Japan)	307
Letters to the Editor	315
Calendar	323

Number 3

A Special Issue on Computer Applications for Operator Support in Large Technical Processes	
Guest Editorial W. BASTL (FRG)	325
Computer Applications for Control Room Operator Support in Nuclear Power Plants BILL K.-H. SUN & DAVID G. CAIN (USA)	331

<i>Contents of Volume 33</i>	453
Advanced Functions and Systems for Operator Support and Plant Management H. D. FISCHER, H. HOFMANN & H. ROTH-SEEFRID (FRG)	341
Advanced Man-Machine System for Nuclear Power Plants—Operator Support Functions and Current Developmental Status KANJI KATO, HIROYASU HAYAKAWA & TAKAO MASUI (Japan)	365
SODEXPERT: A Control Room Expert System for PWR Secondary System Chemical Contamination Diagnosis P. EON DUVAL, J. M. FIQUET, P. HANNEDOUCHÉ & O. MENET (France)	389
Computer Aided Surveillance and Control of the Rossendorf Reactor System FRANK BALDEWEG & JOE KLEBAU (FRG)	405
Operator Support Systems and Artificial Intelligence J. JENKINSON, R. SHAW & P. ANDOW (UK)	419
Operator Assistance in Dynamic Process Environments: What Can Expert Systems Tell Us That We Do Not Already Know? LOTHAR FELKEL (FRG)	439
Calendar	449

